



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/815,479

03/31/2004

Hiroshi Itoh

1232-5360

8559

27123 7590 08/20/2007  
MORGAN & FINNEGAN, L.L.P.  
3 WORLD FINANCIAL CENTER  
NEW YORK, NY 10281-2101

EXAMINER

PINKNEY, DAWAYNE

ART UNIT

PAPER NUMBER

2873

MAIL DATE

DELIVERY MODE

08/20/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

TH

**Office Action Summary**

Application No.

10/815,479

Applicant(s)

ITO, HIROSHI

Examiner

DaWayne A. Pinkney

Art Unit

2873

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 June 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 8, 10-12, 15 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Berger et al. (US 5, 912, 720).

Regarding **claim 1**, Berger discloses, an ophthalmologic image pickup system, comprising:

an image pickup device including; image data generation means for generating image data of an eye fundus to be examined (Column 3, lines 41-44, Column 5, lines 13-25 and 10 and 14 of Fig. 1);

device information generation means for generating device information to identify the device (which is deemed inherent); and

data output means for outputting the image data and the device information, and an image-processing device including (Column 3, lines 41-44, Column 4, lines 7-10, Column 5, lines 34-40 and Fig. 1);

data input means for inputting the image data and the image pickup device information, and the device information output from the output means of the image pickup device (Column 3, lines 41-44, Column 4, lines 7-10, Column 5, lines 34-40 and Fig. 1);

Art Unit: 2873

device information determination means for determining the image pickup device based on the device information inputted through the data input means (Column 3, lines 41-44, Column 4, lines 7-10 and Fig. 1); and

image processing means for performing different image processing on the inputted image data in accordance with a determination result of the device information determination means (Column 3, lines 1-3, Column 3, lines 58-64 and Column 6, lines 44-47).

Regarding **claim 8**, Berger discloses, an ophthalmologic image pickup system according to claim 1, wherein the device information generation means is connected with the image data generation means (Column 4, lines 7-10 and Column 5, lines 34-40), and the image data generation means adds the device information generated by the device information generation means to the image data and outputs the image data to which the device information is added to the device information determination means (Column 4, lines 7-10, Column 4, lines 16-25, Column 5, lines 34-40 and Column 6, lines 1-8).

Regarding **claim 10**, Berger discloses, an ophthalmologic image pickup system, comprising:

an image pickup device including image data generation means for picking up an image of an eye to be examined to generate image data thereof (Column 3, lines 41-44, Column 4, lines 7-10, Column 5, lines 13-25 and 10 and 14 of Fig. 1); and

an image processing apparatus including:

image pickup information determination means for determining image pickup information (Column 3, lines 1-3, Column 3, lines 58-64 Column 5, lines 34-36); and image processing means for performing different image processing on the image data in accordance

Art Unit: 2873

with a result of the image pickup information determination means (Column 3, lines 1-3, Column 3, lines 58-64, Column 5, lines 34-36).

Regarding **claim 11**, Berger discloses, an ophthalmologic image pickup system according to claim 10, wherein the image pickup device further comprises image pickup information generation means for generating image pickup information related to an image pickup mode upon image pickup (which is deemed inherent), the image pickup information generation means is connected with the image data generation means (Column 4, lines 7-10 and Column 5, lines 34-40), and the image data generation means adds the device information generated by the device information generation means to the image data and outputs the image data to which the image pickup information is added to the device information determination means (Column 4, lines 7-10, Column 4, lines 16-25, Column 5, lines 34-40 and Column 6, lines 1-8).

Regarding **claim 12**, Berger discloses, an ophthalmologic image pickup system according to claim 10, wherein the image pickup mode is one of a color image pickup mode, a Fluorescein fundus angiography mode, and an Indocyanine green angiography mode (Column 1, lines 57-61, Column 3, lines 46-51 and Column 6, lines 29-33).

Regarding **claim 15**, Berger discloses, an ophthalmologic image processing apparatus, comprising:

image processing means for processing image data outputted from an ophthalmologic image pickup device (Column 3, lines 1-3, Column 3, lines 58-64, Column 5, lines 34-36); and

device information determination means for determining device information inputted from the ophthalmologic image pickup device (which is deemed inherent),

Art Unit: 2873

wherein the image data is processed in accordance with the determined device information (Column 3, lines 1-3, Column 3, lines 58-64, Column 5, lines 34-36).

Regarding **claim 17**, Berger discloses, an ophthalmologic image pickup device, comprising:

image data generation means for picking up an eye fundus image of an eye to be examined to generate image data thereof (Column 3, lines 41-44, Column 5, lines 13-25 and 10 and 14 of Fig. 1);

device information generation means for generating device information of the ophthalmologic image pickup device (which is deemed inherent); and

output means for adding the device information to the image data and outputting the image data to which the device information is added (Column 3, lines 41-44, Column 4, lines 7-10, Column 5, lines 34-40 and Fig. 1).

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

Art Unit: 2873

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
5. Claims 2-7, 9, 13-14, 16 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berger et al. (US 5, 912, 720) as applied to claims 1, 10 and 15 above, further in view of The Admitted Prior Art.

The cited primary reference, Berger remains as applied to **claims 1, 10 and 15 above**.

The cited primary reference does not teach the image pickup device information includes information indicating whether or not at least one of processing for vertically reversing the image data and processing for horizontally reversing the image data with the image processing means should be performed by the image processing apparatus.

The added secondary reference, The Admitted Prior Art discloses, an ophthalmologic image pickup system according to claim 1, wherein the image pickup device information includes information indicating whether or not at least one of processing for vertically reversing the image data and processing for horizontally reversing the image data with the image processing means should be performed by the image processing apparatus (Page 2, lines 1-5 in The Admitted Prior Art of the instant specification).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the image pickup device processing of The Admitted Prior Art with the device of Berger because the image pickup device processing of The Admitted Prior Art is conventional.

Regarding **claim 3**, The Admitted Prior Art discloses, An ophthalmologic image pickup system according to claim 1, wherein the image pickup device information includes information

Art Unit: 2873

indicating whether or not the image data should be synthesized with an electronic aperture mask by means of the image processing means (Page 2, lines 5-8).

Regarding **claim 4**, Berger discloses, an ophthalmologic image pickup system, comprising:

a plurality of image pickup devices, each of which picks up an image of an eye to be examined to generate image data thereof (Column 5, lines 13-17 and Column 6, lines 12-14);

device information determination means for determining device information related to each of the plurality of image pickup devices (which is deemed inherent); and

image processing means for performing different image processing on the image data in accordance with each of the plurality of determination results of the device information determination means and the processing table (Column 3, lines 1-3, Column 3, lines 58-64 and Column 6, lines 44-47).

Neither Berger nor The Admitted Prior Art disclose a processing table showing an image data processing method corresponding to each of the plurality of image pickup devices, it would have been obvious to one of ordinary skill in the art at the time the invention was made for the image processing means to display the image data processing method to be performed on each of the images captured by the image pickup devices in some form (table, chart, listing, etc.) because this allows the examiner to see the image data processing method that is to be performed on the images captured by the image pickup devices.

Regarding **claim 5**, Berger discloses, an ophthalmologic image pickup system according to claim 4, wherein the device information includes a description of a kind of the image pickup device (which is deemed inherent).



Art Unit: 2873

Regarding **claim 6**, The Admitted Prior Art discloses, the image data is subjected to reverse processing (Page 2, lines 10-15).

Neither Berger nor The Admitted Prior Art disclose the processing method shown in the processing table relates to whether or not at least one of the processing in which the image data is horizontally or vertically reversed should be performed, however, it would have been obvious to one of ordinary skill in the art at the time the invention was made for the processing table to relate to whether or not reverse processing should be performed because this is a conventional image process performed by ophthalmologic devices. Therefore, the user of the image processing means should have the option to perform this image processing method.

Regarding **claim 7**, The Admitted Prior Art discloses, an electric aperture mask with the image data is performed (Page 2, lines 5-8).

Neither Berger nor The Admitted Prior Art disclose the processing method shown in the processing table is whether the composition of an electric aperture mask with the image data should be performed or not, however, it would have been obvious to one of ordinary skill in the art at the time the invention was made for the processing method shown in the processing table is whether the composition of an electric aperture mask with the image data should be performed or not because this is a conventional image process performed by ophthalmologic devices. Therefore, the user of the image processing means should have the option to perform this image processing method.

Regarding **claim 9**, neither Berger nor The Admitted Prior Art disclose, the image data and the device information are separately inputted to the device information determination means.

Art Unit: 2873

However, it would have been obvious to one of ordinary skill in the art at the time the invention was made that the image data and the device information are separately inputted to the device information determination means because the device information must be sent first in order for the device to be recognized so that the image data can be sent to the image processing device.

Regarding **claim 13**, The Admitted Prior Art discloses, an ophthalmologic image pickup system according to claim 10, wherein the different image processing include at least one of conversion of the image data into a white-and-black image,  $\gamma$  characteristic adjustment thereof, and contrast processing thereof when the image pickup mode is one of the Fluorescein fundus angiography mode and the Indocyanine green angiography mode (Page 3, lines 2-14).

Regarding **claim 14**, Berger discloses, an ophthalmologic image pickup system according to claim 10, wherein the image pickup device further comprises image pickup information generation means for generating image pickup information related to an image pickup mode upon image pickup (which is deemed inherent).

Neither Berger nor The Admitted Prior Art disclose, the image data and the image pickup information are separately inputted to the device information determination means.

However, it would have been obvious to one of ordinary skill in the art at the time the invention was made that the image data and the image pickup information are separately inputted to the device information determination means because the device information must be sent first in order for the device to be recognized so that the image data can be sent to the image processing apparatus.

Art Unit: 2873

Regarding **claim 16**, The Admitted Prior Art discloses, an ophthalmologic image processing apparatus according to claim 15, wherein at least one of processing for vertically reversing the image data, processing for horizontally reversing the image data, and processing for synthesizing an aperture with the image data is performed in accordance with the device information (Page 2, lines 1-5).

Regarding **claim 18**, The Admitted Prior Art discloses, An ophthalmologic image pickup system according to claim 1, wherein the image pickup device information includes information indicating whether or not the image data should be synthesized with an electronic aperture mask by means of the image processing means (Page 2, lines 5-8).

Regarding **claim 19**, Berger discloses, an ophthalmologic image pickup system according to claim 4, wherein the device information generation means is connected with the image data generation means (Column 4, lines 7-10 and Column 5, lines 34-40), and the image data generation means adds the device information generated by the device information generation means to the image data and outputs the image data to which the device information is added to the device information determination means (Column 4, lines 7-10, Column 4, lines 16-25, Column 5, lines 34-40 and Column 6, lines 1-8).

Regarding **claim 20**, neither Berger nor The Admitted Prior Art disclose, the image data and the device information are separately inputted to the device information determination means.

However, it would have been obvious to one of ordinary skill in the art at the time the invention was made that the image data and the device information are separately inputted to the device information determination means because the device information must be sent first in

Art Unit: 2873

order for the device to be recognized so that the image data can be sent to the image processing device.

*Response to Arguments*

6. Applicant's arguments filed 06/27/2007 have been fully considered but they are not persuasive.

7. In response to applicants arguments that Berger shows that it is silent as to an image pickup device including a device information generation means and absent from the hardware configuration of Berger's apparatus is any element that is related to a "device information generation means for generating device information to identify the image pickup device" and arguments that absent from Berger's apparatus is any image processing element related to a "device information determination means for determining the image pickup device based on the device information imputed through the data input means." Examiner would like to point out that in order for a device to be in communication with a processor (computer, CPU, etc.) the image pickup device which is being connected to the processor must have information generation means for generating device information to identify the device to allow the device to be recognized by the processor and the processor must have device information determination means that recognizes that the image pickup device which is connected to the processor as this allows communication between the device and the processor. If the image pickup device did not have information generation means and the processor did not have device information determination means, then the device and the processor would not be able to communicate each other and the processor would not be able to receive images that are captured by the device.

8. In response to applicants arguments that there is only one image pickup device for the acquired Fundus images in Berger. Examiner points out that a plurality of image pickup devices are shown in Fig. 1, since Berger shows that more than one Fundus image is attained by CCD camera 14.

*Conclusion*

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Snook (US 5, 886, 767) teaches an ophthalmologic image pickup system which has a plurality of image pickup devices and the image pickup means includes device information generation means, and device information determination means.

Suzuki (US 5, 530, 493) teaches an ophthalmologic image pickup system, which has an image pickup device and the image pickup means, includes device information generation means, and device information determination means.

Fujeida (US 6, 190, 011) teaches an ophthalmologic image pickup system, which has an image pickup device and the image pickup means, includes device information generation means, and device information determination means.

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period


Art Unit: 2873

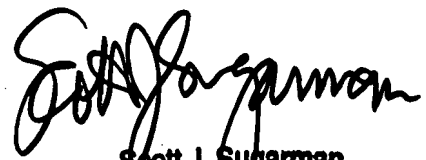
will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DaWayne A. Pinkney whose telephone number is (571) 270-1305. The examiner can normally be reached on Monday-Thurs. 8 a.m.- 4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Mack can be reached on (571) 272-2333. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
DAP  
08/16/2007

  
Scott J. Sugarman  
Primary Examiner